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CONTENTS

AN ILLUSTRATED LIST OF THE

BRITISH TORTRICIDAE

PART II:

OLETHREUTINAE

By J. D. BRADLEY

Illustrated by 19 plates.

BEETLES
OF THE
BRITISH ISLES

by

E. F. LINSSEN
F.Z.S., F.R.E.S., F.R.P.S.

IN TWO VOLUMES

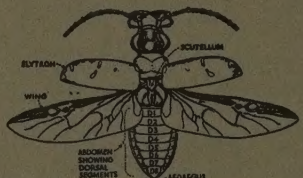

FIG. 2.—*Cicindela campestris* L., male. The Common Tiger Beetle. (Adapted after Gangbauer.)

Illustration reduced

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EDITORIAL NOTE

This number is devoted to the second and final part of AN ILLUSTRATED LIST OF THE BRITISH TORTRICIDAE. The first part (Part I: Tortricinae and Sparganothinae, by J. D. Bradley and E. L. Martin) was published in *Ent. Gaz.*, Vol. 7, pp. 151-156, plates 1-10 (1956).

It was at first intended to publish this second part in several instalments, but we feel that the present arrangement will be more convenient for all those people who will wish to keep the two parts of the paper together, or bind them, for reference, as it will not involve buying and dismembering several parts of the *Gazette*. Extra copies may be obtained from the publisher, price 12s. 6d. post free. Copies of the first part are also available, price 6s. 6d. post free (the two parts together 18s. 9d. post free).

AN ILLUSTRATED LIST OF THE BRITISH TORTRICIDAE PART II: OLETHREUTINAE

By J. D. BRADLEY
British Museum (Natural History)

The general arrangement of this part is similar to that of Part I, which contains the subfamilies Tortricinae and Sparganothinae (1956, *Ent. Gazette*, **7**: 151-156, plates 1-10).

The classification has been revised and is based on the comparative morphology of the male and female genitalia. The Olethreutinae as a whole, however, are a plastic group, with generic and subgeneric limits and relationships sometimes obscure; and in some genera there exist sibling species and species having biological forms whose status is problematic. As this list is restricted to the British fauna the complexities of generic and subgeneric limitations, many of which I have been unable to establish satisfactorily on the study of a limited fauna, have been circumvented by treating the genus in a broad sense and omitting subgeneric divisions. When, however, species appear to represent subgenera, and in a few instances genera as yet undescribed, I have contrived to place them in positions where they can be segregated with the least rearrangement of the collection.

The apparently biological forms [1] found in some species require further investigation as their significance is not properly known. In this connection it is possible that *Dichrorampha saturnana* Guenée, *Pammene herrichiana* Heinemann and *Spilonota laricana* Heinemann, although regarded as good species may actually be no more than forms of *D. plumbana* Scopoli, *P. fasciana* Linné and *S. ocellana* Schiffermüller respectively. The genitalic differences in these three species are small and may prove to be due to variation within the species and only of infraspecific importance.

In compiling this list I have had the great advantage and pleasure of personal communication with Dr. N. S. Obraztsov, of New York, who has made known to me the basis of the classification he will use in his Revision of the Genera of the Palaearctic Olethreutinae, a large part of which is completed and awaiting publication in the *Tijdschrift voor Entomologie*. Dr. Obraztsov proposes to erect several new genera and subgenera, but as his work is not yet published I am unable to use them. I have, however, included two of the generic names given me by Dr. Obraztsov, namely *Pseudococcyx* and *Cely-*

[1] Dr. BERNHARD SWATSCHEK (1958, Die Larvalsystematik der Wickler. *Abhandlungen zur Larvalsystematik der Insecten*, **3**: 187-189) has since shown that the larval chaetotaxy of *Ancylis inornatana* H.-S. and *A. diminutana* Haw., listed herein as forms of *A. geminana* Don., indicates that they are good species.

phoides, as both appear in the current list of the Spanish Tortricidae published in *Graellsia* (1955, *Graellsia*, **13** : Supplement).

A total of two hundred and nineteen species is listed and all except two of them are believed to be resident in the British Isles. The exceptions are *Grapholita molesta* Busck and *Olethreutes leucotreta* Meyrick, which have slender claim to British status as they are known only from casual importations.

A specimen showing the characteristic or typical wing markings of each species has been illustrated, the male of species exhibiting pronounced sexual dimorphism being featured. The specimens illustrated have been selected from the collections in the British Museum (Natural History). Photographs and drawings are by the author.

SPECIES ADDED TO THE BRITISH LIST SINCE THE PUBLICATION OF *MEYRICK'S REVISED HANDBOOK OF BRITISH LEPIDOPTERA*, 1928

The following seven species are either new to the British list or were omitted by Meyrick. Species given as synonyms by Meyrick but subsequently reinstated as good species are not included. Details of most of the latter together with up-to-date biological information on the British Tortricidae as a whole, are given by Mr. L. T. Ford (1949, *Proc. S. Lond. ent. nat. Hist. Soc.*, **1947-48**: 50-53; 1949, *A Guide to the Smaller British Lepidoptera*, pp. 1-230; and 1959, *Supplement*, pp. 1-16 (cover dated May, 1958).

Laspeyresia conicolana Heylaerts

This species was first detected by Mr. H. C. Huggins (1931, *Entomologist*, **64**: 27, pl. 1, figs. 1-5). It had presumably escaped recognition earlier owing to its superficial resemblance to *cosmophorana* Tr., from which it differs by having the metallic fasciae of the forewings almost invisible when viewed from above, and hindlegs dark brown not white as in *cosmophorana*.

The larva feeds entirely within the cone of the Scots pine (*Pinus sylvestris*), eating the seeds, and pupating within the cone. The moth emerges in June and flies round the tops of the trees in the late afternoon. It is recorded from Hampshire, Sussex and Kent.

Laspeyresia zebeana Ratzeburg

Discovered in Britain in 1944 by Mr. H. S. Hanson as a breeding species in the larch plantations around Thetford, Norfolk (1946, *Proc. R. ent. Soc. Lond.* (C) **11**: 25).

This species is a pest on larch in Central Europe. It has a two-year life cycle, the larva burrowing in the larch shoots, making a gall, and pupating within. The moth emerges in May and June.

Pammene aurantiana Staudinger

Two specimens were taken by Mr. B. O. C. Gardiner at Dover, Kent, in July, 1944, but it was not until 1957 that they were identified at about the same time as two others taken the previous year by Mr. L. Price, one at Rodborough Common, Gloucestershire, on 31st July, and the other at Studland, Dorset, on 31st August (1957, *Ent. Rec.*, **69**: 205, and 1958, *Ent. Gaz.*, **9**: 60, pl. 4). The species has since been reported from various localities in the south of England, including Ham Street, Kent; Weybridge, Surrey; Portland, Dorset; and from Tresco in the Scilly Isles.

The moth resembles *Dichrorampha flavidorsana* Knaggs in general appearance, but may be distinguished by the black spot at the apex of the forewing. It flies during the day in July and August.

This is a European species and has apparently extended its range to the British Isles during the last decade or so. The larva has not yet been recorded from this country: its reputed food-plant abroad is maple (*Acer*), probably the seeds.

Grapholita prunivorana Ragonot (*lobarzewskii* Nowicki *auct. nec* Nowicki)

This species first came to notice in 1957 when a specimen was taken in June at Dungeness, Kent, by the late Rev. Canon Edwards and Mr. S. Wakely (1958, *Ent. Rec.*, **70**: 70, pl. 2). Mr. H. C. Huggins (*loc. cit.* p. 71) records two specimens he had taken at Sittingbourne, Kent, on 16th and 18th June, 1922 which had been determined by Meyrick as dwarf *woeberiana* Schiff. (*formosana* Scop.).

The larva feeds in the fruits of *Prunus* and *Cerasus*, but so far as is known has not yet been found in this country.

The comparatively long, narrow forewings give this species an appearance which immediately catches the eye and distinguishes it from *gallicana* Guen. (*rufillana* Doubl.) and *janthinana* Dup., which it otherwise superficially resembles. This species was originally recorded in this country under the name *lobarzewskii* Nowicki with *prunivorana* Ragonot as a synonym. Dr. Obraztsov informs me that this synonymy is incorrect as the two species are distinct. The name *prunivorana* is therefore used here as I have compared the type of this species (in the Paris Museum) with the Dungeness specimen mentioned above and find they are conspecific.

Eucosma heringiana Jäckh (*rubescana* Const. *auct. nec* Const.)

This species appears to have had an unfortunate and confused history. There are two specimens in the Stephens-Stainton collection in the British Museum (Natural History) apparently of British origin, and although taken by Stephens many years ago have until recently stood under the name *conterminana* H.-S. Two specimens taken by Mr. H. C. Huggins (1924, *Entomologist*, **57**: 14) on the saltings in

the Sittingbourne district of Kent in June, 1922, were regarded as a variety of *aspidiscana* Hübn. until, some twelve years later, at the instigation of Mr. Huggins, a detailed examination of the genitalia was made by F. N. Pierce, who established that it was indeed a separate species (1934, *Entomologist,* **67**:169, fig. 1, pl. 2) and determined it as *rubescana* Const. It remained under this name until 1953, when E. Jäckh, of Bremen, found it was not *rubescana* and described it as a new species with the name *heringiana* (1953, *Zeitschr. Lepidopt.,* **3**:43).

The larva lives between the leaves and on the stems of sea aster (*Aster tripolium*) during August. The moth emerges in June and July and flies over the saltings at dusk.

Bactra robustana Christoph (*scirpicolana* Pierce & Metc.)

Pierce and Metcalfe (1935, *Entomologist,* **68**:148) added this species to the British list when they demonstrated that the genitalia differed from those of *Bactra lanceolana* Hübn., and believing it to be undescribed named it *scirpicolana.* The name *scirpicolana,* however, falls to the earlier one of *robustana* Chr., the type of which is in the British Museum (Natural History).

This is a salt-marsh species, the larva feeding in the stems of the salt marsh club rush (*Scirpus maritimus*) in May and June, the moth emerging in June and July.

Olethreutes leucotreta Meyrick

An exotic species common in Africa where the larva feeds on various fruits and on cotton. It is occasionally brought to this country as a larva on imports of oranges. Moths have been bred from such imported larvae, but it is improbable that the species can survive outside the tropics or subtropics.

THE GENITALIA OF BRITISH SPECIES OF OLETHREUTINAE NOT ILLUSTRATED IN *THE GENITALIA OF THE BRITISH TORTRICIDAE*

By PIERCE AND METCALFE, 1922

The male and female genitalia of twelve species are figured below as follows:

1. *Laspeyresia conicolana* Heyl.
2. *Laspeyresia zebeana* Ratz.
3. *Grapholita molesta* Busck
4. *Grapholita prunivorana* Rag.
5. *Pammene aurantiana* Staud.
6. *Eucosma heringiana* Jäckh (♂)
7. *Gypsonoma nitidulana* Zell.
8. *Crocidosema plebejana* Zell.
9. *Ancylis tineana* Hübn.
10. *Bactra robustana* Chr.
11. *Endothenia nigricostana* Haw.
12. *Olethreutes leucotreta* Meyr.

1

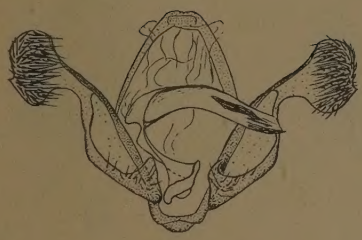
1a

Laspeyresia conicolana Heylaerts
Fig. 1: Male, ventral view. Fig. 1a: Female, ventral view.

2

2a

Laspeyresia zebeana Ratzeburg
Fig. 2: Male, ventral view. Fig. 2a: Female, ventral view.



3

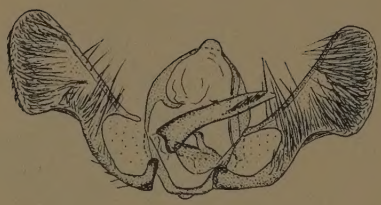
3a

Grapholita molesta Busck
Fig. 3: Male, ventral view. Fig. 3a: Female, ventral view.

4

4a.

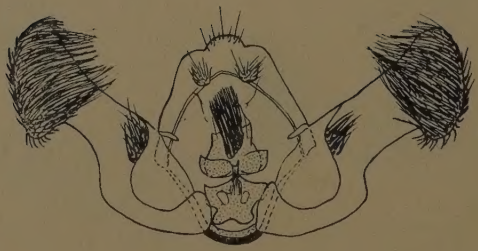
Grapholita prunivorana Ragonot
Fig. 4: Male, ventral view. Fig. 4a: Female, ventral view.



5

5a

Pammene aurantiana Staudinger
Fig. 5: Male, ventral view. Fig. 5a: Female, ventral view.



6

Eucosma heringiana Jäckh
Fig. 6: Male, ventral view.

7

7a

Gypsonoma nitidulana Zeller
Fig. 7: Male, ventral view. Fig. 7a: Female, ventral view.

8

8a

Crocidosema plebejana Zeller
Fig. 8: Male, ventral view. Fig. 8a: Female, ventral view.

9

9a

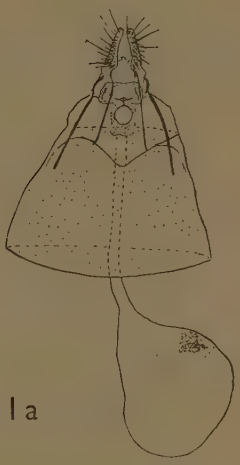
Ancylis tineana Hübner
Fig. 9: Male, ventral view. Fig. 9a: Female, ventral view.

10

10a

Bactra robustana Christoph
Fig. 10: Male, ventral view. Fig. 10a: Female, ventral view.

11



11a

Endothenia nigricostana Haworth
Fig. 11: Male, ventral view. Fig. 11a: Female, ventral view.

12

12a

Olethreutes leucotreta Meyrick
Fig. 12: Male, ventral view. Fig. 12a: Female, ventral view.

SYSTEMATIC LIST OF GENERA AND SPECIES

TORTRICIDAE

OLETHREUTINAE (EUCOSMINAE)

DICHRORAMPHA Guenée
Hemimene Hübn. *auct. nec* Hübn.

1 petiverella Linné
2 alpinana Treitschke
quaestionana Zell.
3 flavidorsana Knaggs
4 gueneeana Obraztsov
politana Gn. *nec* Schiff.
5 plumbagana Treitschke
6 senectana Guenée
cinerosana H.-S.
7 sequana Hübner
8 acuminatana Zeller
9 consortana Stephens
10 simpliciana Haworth
11 pseudoalpestrana Danilevsky
alpestrana H.-S. *auct. nec* H.-S.
12 montanana Duponchel
alpestrana H.-S.
tanaceti Staint.
herbosana Barr.
13 plumbana Scopoli
torrana Pierce & Metc.
14 saturnana Guenée
15 aeratana Pierce & Metcalfe
? *sylvicolana* Hein.

LASPEYRESIA Hübner
16 succedana Schiffermüller
ulicetana Haw.
17 nigricana Fabricius
proximana Haw.
18 cosmophorana Treitschke
19 leguminana Zeller
20 gallicana Guenée
rufillana Doubl.
21 aurana Fabricius
22 servillana Duponchel
23 corollana Hübner
heegerana Dup. Wilk. *nec* Dup.
24 conicolana Heylaerts
25 zebeana Ratzeburg
26 pomonella Linné
27 coniferana Saxesen
28 cognatana Barrett
pactolana Zell. *auct. nec* Zell.
29 fagiglandana Zeller
grossana Haw.
30 splendana Hübner
31 strobilella Linné
32 microgrammana Guenée

GRAPHOLITA Treitschke
Grapholitha Tr.
33 gemmiferana Treitschke
34 janthinana Duponchel
lediana Haw.
35 tenebrosana Duponchel
roseticolana Zell.
36 funebrana Treitschke
37 molesta Busck
38 prunivorana Ragonot
lobarzewskii Now. *auct. nec* Now.
39 lathyrana Hübner
scopariana H.-S.
40 jungiella Linné
perlepidana Haw.
41 dorsana Fabricius
42 orobana Treitschke
43 caecana Schläger
44 compositella Fabricius
45 internana Guenée
46 pallifrontana Zeller

PAMMENE Hübner
Hemimene Hübn.
47 splendidulana Guenée
48 obscurana Stephens

49 inquilina Fletcher
fimbriana Haw.
50 argyrana Hübner
costipunctana Haw. Pierce *nec* Haw.
51 albuginana Guenée
gallicolana Zell.
52 spiniana Duponchel
53 populana Fabricius
54 aurantiana Staudinger
55 regiana Zeller
56 trauniana Schiffermüller
57 fasciana Linné
juliana Curt.
nimbana H.-S.
58 herrichiana Heinemann
59 germmana Hübner
germarana Hübn.
germana Hübn.
60 ochsenheimeriana Zeller
61 rhediella Clerck

STROPHEDRA Herrich-Schäffer
62 weirana Douglas
63 nitidana Fabricius

LATHRONYMPHA Meyrick
64 strigana Fabricius
politana Schiff.
hypericana Hübn.

SELANIA Stephens
65 leplastriana Curtis

EUCOSMOMORPHA Obraztsov
66 albersana Hübner
rheediana L. Haw. *nec* L.

ENARMONIA Hübner
67 formosana Scopoli
woeberiana Schiff.

RHYACIONIA Hübner
68 buoliana Schiffermüller
69 pinivorana Zeller
70 pinicolana Doubleday
71 logaea Durrant

CLAVIGESTA Obraztsov
72 sylvestrana Curtis
mulsantiana Ratz.
73 purdeyi Durrant

PETROVA Heinrich
74 resinella Linné

PSEUDOCOCCYX Obraztsov
75 posticana Zetterstedt
duplana Hübn. Staint. *nec* Hübn.
76 turionella Linné
turionana Hübn.

SPILONOTA Stephens
77 ocellana Schiffermüller
78 laricana Heinemann
lariciana auct.

THIODIA Hübner
79 citrana Hübner

EUCOSMA Hübner
80 hohenwartiana Schiffermüller
f. scopoliana Haw. *nec* Schiff.
f. parvulana Wilk.
81 fulvana Stephens
82 cana Haworth
hohenwartiana Schiff. Meyr. *nec* Schiff.
83 expallidana Haworth
84 aspidiscana Hübner
85 heringiana Jäckh
rubescana Const. *auct. nec* Const.
86 conterminana Herrich-Schäffer
87 tripoliana Barrett
aemulana Schläg. *auct. nec* Schläg.
88 latiorana Herrich-Schäffer
aemulana Schläg.
89 maritima Westwood
wimmerana Tr. Wilk. *nec* Tr.
90 campoliliana Schiffermüller
nigromaculana Haw.

91 pauperana Duponchel
paykulliana F. Haw. *nec* F.
92 pupillana Clerck

ERIOPSELA Guenée
93 quadrana Hübner

PSEUDEUCOSMA Obraztsov
94 caecimaculana Hübner

EPIBLEMA Hübner
95 foenella Linné
96 scutulana Schiffermüller
pflugiana F. Haw. *nec* F.
luctuosana Dup.
f. cirsiana Zell.
97 cnicicolana Zeller
littoralana Pierce & Metc.
98 farfarae Fletcher
brunnichiana Fröl.
99 trigeminana Stephens
costipunctana Haw.
100 turbidana Treitschke

CACOCHROEA Lederer
101 grandaevana Zeller

PARDIA Guenée
102 cynosbatella Linné
tripunctana Schiff.

NOTOCELIA Hübner
103 uddmanniana Linné
104 suffusana Duponchel
trimaculana Haw.
105 rosaecolana Doubleday
106 aquana Hübner
roborana Tr.
107 incarnatana Hübner
108 tetragonana Stephens

GIBBERIFERA Obraztsov
109 simplana Fischer von Röslerstamm

GYPSONOMA Meyrick
110 aceriana Duponchel
comitana Haw.
111 sociana Haworth
neglectana Dup.
112 dealbana Frölich
incarnana Hübn. Haw. *nec* Hübn. (*err. pro incarnatana*)
113 oppressana Treitschke
114 minutana Hübner
115 nitidulana Zeller

ZEIRAPHERA Treitschke
116 ratzeburgiana Saxesen
117 rufimitrana Herrich-Schäffer
118 insertana Fabricius
corticana Hübn. *auct. nec* Schiff.
119 diniana Guenée
occultana Dougl.
pinicolana Zell.
griseana Hübn. Fletch. *nec* Hübn.

GRISELDA Heinrich
120 stagnana Schiffermüller
fractifasciana Haw.
121 myrtillana Westwood
vacciniana Zell.

CROCIDOSEMA Zeller
122 plebejana Zeller

ACROCLITA Lederer
123 subsequana Herrich-Schäffer
consequana H.-S.
hawkerana Staint.

RHOPOBOTA Lederer
124 ustomaculana Curtis
125 naevana Hübner
unipunctana Haw.
geminana Steph.

EPINOTIA Hübner
Astatia Hübn.
126 stroemiana Fabricius
similana Hübn. *nec* Schiff.
bimaculana Don.

127 maculana Fabricius
ophtalmicana Hübn.
ophthalmicana Hübn.
128 sordidana Hübner
stabilana Wilk.
129 caprana Fabricius
semifuscana Steph.
piceana Haw.
130 brunnichana Linné
sinuana Schiff.
131 solandriana Linné
132 trimaculana Donovan
133 subocellana Donovan
134 bilunana Haworth
135 demarniana Fischer von Röslerstamm
136 immundana Fischer von Röslerstamm
137 tetraquetrana Haworth
triquetrana Haw.
angulana Haw.
138 nisella Clerck
139 cinereana Haworth
140 tenerana Schiffermüller
penkleriana F.R. *nec* Schiff.
retusana Haw.
141 nigricana Herrich-Schäffer
142 nemorivaga Tengström
finitimana Doubl.
143 tedella Clerck
144 fraternana Haworth
proximana H.-S.
distinctana Wilk.
145 paykulliana Fabricius
ramella H.-S. *nec* L.
146 signatana Douglas
kroesmanniana Hein.
147 nanana Treitschke
148 rubiginosana Herrich-Schäffer
bouchardana Doubl.
149 cruciana Linné
150 augustana Hübner
alticolana Steph.
151 mercuriana Frölich
subsequana Haw. Steph. *nec* Haw.
monticolana Dup.
152 crenana Hübner
153 pygmaeana Hübner
154 subsequana Haworth
pygmaeana Hübn. Wilk. *nec* Hübn.

ANCYLIS Hübner
155 achatana Schiffermüller
156 comptana Frölich
157 unguicella Linné
158 uncana Hübner
? *uncella* Schiff,
159 geminana Donovan
biarcuana Steph.
f. inornatana H.-S.
subarcuana Dougl.
f. diminutana Haw.
160 mitterbacheriana Schiffermüller
161 upupana Treitschke
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EUDEMIS Hübner
170 profundana Schiffermüller
171 porphyrana Hübner
pomedaxana Pierce & Metc.
pomedax Meyr.

BACTRA Stephens
172 furfurana Haworth
173 lanceolana Hübner
rufana Steph.
174 robustana Christoph
scirpicolana Pierce & Metc.

LOBESIA Guenée
175 reliquana Hübner
permixtana Hübn. *nec* Schiff.
176 abscisana Doubleday
fuligana Hübn. Haw. *nec* Hübn.
177 littoralis Westwood
venustana Dougl.
ssp. annatensis Turner
178 euphorbiana Freyer

ENDOTHENIA Stephens
179 gentianaeana Hübner
gentiana Hübn.
oblongana Haw.
sellana Fröl.
180 marginana Haworth
181 carbonana Doubleday
182 ustulana Haworth
fuligana Hübn. *auct. nec* Haw. *non* Hübn.
183 nigricostana Haworth
184 ericetana Westwood
185 antiquana Hübner
quadrimaculana Haw.

APOTOMIS Hübner
186 semifasciana Haworth
187 lineana Schiffermüller
hartmanniana L.
scriptana Hübn.
188 turbidana Hübner
corticana Hübn. *nec* Schiff.
picana Fröl.
189 betuletana Haworth
190 capreana Hübner
191 sororculana Zetterstedt
192 sauciana Frölich
193 grevillana Curtis
staintoniana Barr.
194 pruniana Hübner

SCIAPHILA Treitschke
195 branderiana Linné
wahlbomiana L.

ORTHOTAENIA Stephens
196 undulana Schiffermüller
urticana Hübn. *nec* Schiff.
aemulana Hübn.

HEDYA Hübner
197 nubiferana Haworth
variegana Hübn.
tripunctana F. Haw. *nec* F.
cynosbatella L. Wilk. *nec* L.
198 ochroleucana Frölich
199 atropunctana Zetterstedt
dimidiana Sodof.
200 salicella Linné

OLETHREUTES Hübner
201 arcuella Linné
202 obsoletana Zetterstedt
irriguana H.-S.
203 doubledayana Barrett
204 decrepitana Herrich-Schäffer
bifasciana Haw.
205 penthinana Guenée
postremana Zell.
206 mygindana Schiffermüller
fulvipunctana Haw.
207 arbutella Linné
208 metallicana Hübner
daleana Doubl.
209 schulziana Fabricius
210 palustrana Zeller
211 olivana Treitschke
micana Hübn. *nec* Schiff.
bistrigana Steph.
212 lacunana Schiffermüller
213 rivulana Scopoli
214 leucotreta Meyrick

EXARTEMA Clemens
215 aurofasciana Haworth
latifasciana Haw.

CELYPHOIDES Obraztsov
216 cespitana Hübner

CELYPHA Hübner
217 woodiana Barrett
218 striana Schiffermüller
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219 rufana Scopoli

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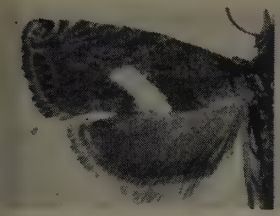
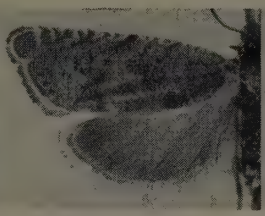
DICHRORAMPHA Guen. **DICHRORAMPHA Guen.** **DICHRORAMPHA Guen.**



1. *petiverella* L.



5. *plumbagana* Tr.

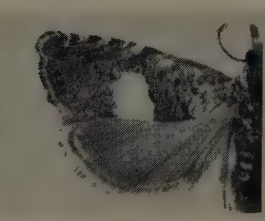
9. *consortana* Steph.

2. *alpinana* Tr.

6. *senectana* Guen.

10. *simpliciana* Haw.

3. *flavidorsana* Knaggs



7. *sequana* Hübn.

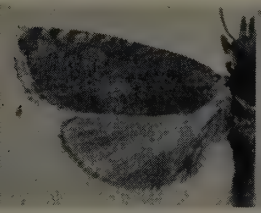
11. *pseudoalpestrana* Danil.

4. *gueneeana* Obr.

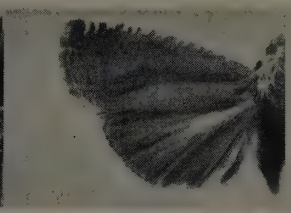
8. *acuminatana* Zell.

12. *montanana* Dup.

DICHRORAMPHA Guen. **LASPEYRESIA Hübn.** **LASPEYRESIA Hübn.**



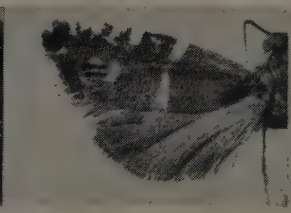
13. *plumbana* Scop.



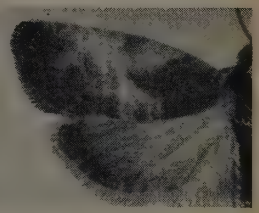
17. *nigricana* F.

21. *aurana* F.

14. *saturnana* Guen.

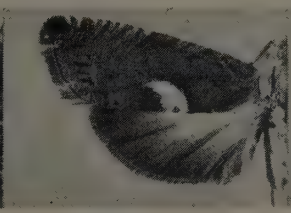


18. *cosmophorana* Tr.



22. *servillana* Dup.

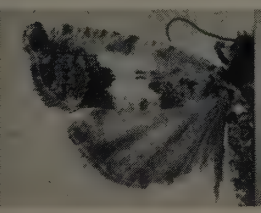
5. *aeratana* Pierce & Metc.



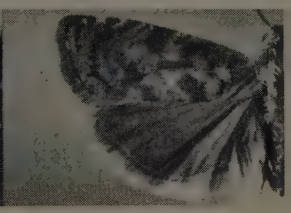
19. *leguminana* Zell.

23. *corollana* Hübn.

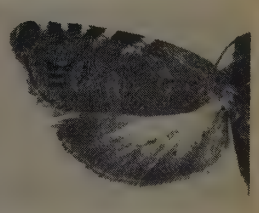
LASPEYRESIA Hübn.



16. *succedana* Schiff.



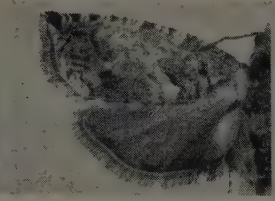
20. *gallicana* Guen.



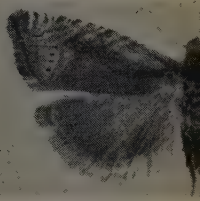
24. *conicolana* Heyl.

LASPEYRESIA Hübn. **LASPEYRESIA Hübn.** **GRAPHOLITA Tr.**

25. *zebeana* Ratz.

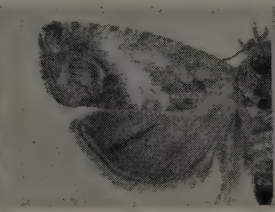


29. *fagiglandana* Zell.



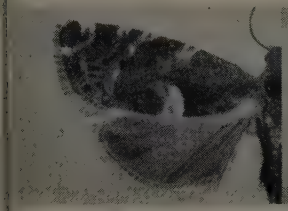
33. *gemmiferana* Tr.

26. *pomonella* L.



30. *splendana* Hübn.

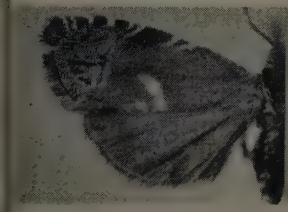
34. *janthinana* Dup.



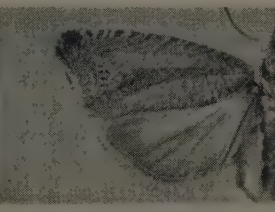
27. *coniferana* Sax.

31. *strobilella* L.

35. *tenebrosana* Dup.



28. *cognatana* Barr.

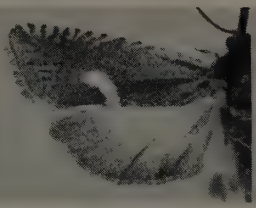


32. *microgrammana* Guen.

36. *funebrana* Tr.

GRAPHOLITA Tr. **GRAPHOLITA Tr.** **GRAPHOLITA Tr.**

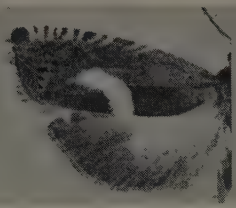
37. *molesta* Busck



41. *dorsana* F.

45. *internana* Guen.

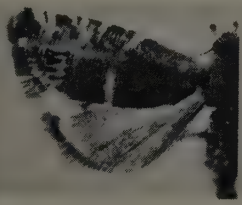
38. *prunivorana* Rag.



42. *orobana* Tr.

46. *pallifrontana* Zell.

PAMMENE Hübn.



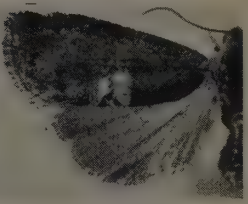
39. *lathyrana* Hübn.

43. *caecana* Schläg.

47. *splendidulana* Guen.

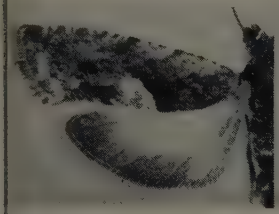
40. *jungiella* L.

44. *compositella* F.

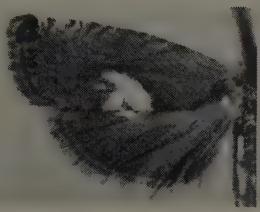


48. *obscurana* Steph.

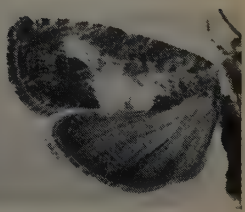
PAMMENE Hübn. **PAMMENE Hübn.** **PAMMENE Hübn.**



49. *inquilina* Fletch.

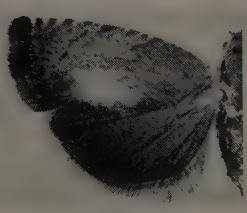


53. *populana* F.

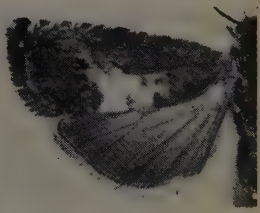


57. *fasciana* L.

50. *argyrana* Hübn.



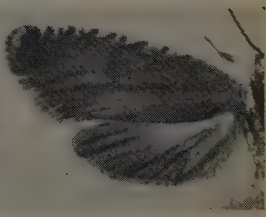
54. *curantiana* Staud.



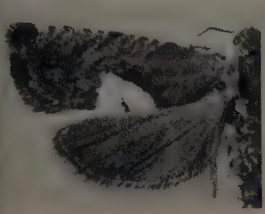
58. *herrichiana* Hein.

51. *albuginana* Guen.

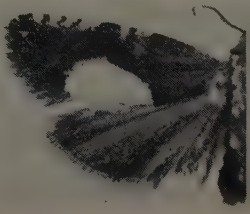
55. *regiana* Zell.



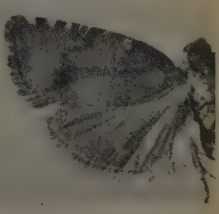
59. *germmana* Hübn.



52. *spiniana* Dup.



56. *trauniana* Schiff.

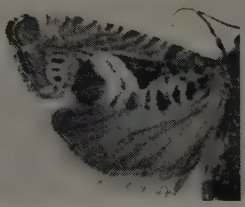


60. *ochsenheimeriana* Zell.

PAMMENE Hübn.

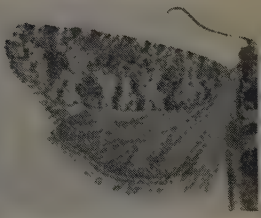
61. *rhediella* Cl.

SELANIA Steph.



65. *leplastriana Curt.*

RHYACIONIA Hübn.

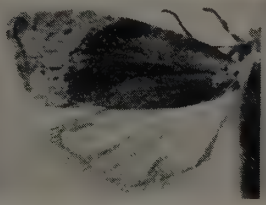


69. *pinivorana* Zell.

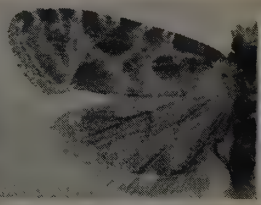
STROPHEDRA H.-S.

62. *weirana* Dougl.

EUCOSMOMORPHA Obr.



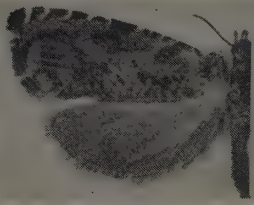
66. *albersana* Hübn.



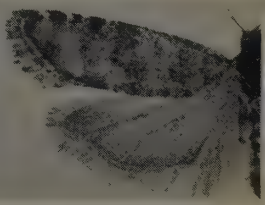
70. *pinicolana* Doubl.

ENARMONIA Hübn.

63. *nitidana* F.



67. *formosana* Scop.



71. *logaea* Durr.

.ATHRONYMPHA Meyr.

64. *strigana* F.

RHYACIONIA Hübn.

68. *buoliana* Schiff.

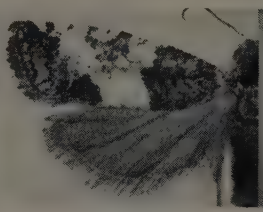
CLAVIGESTA Obr.

72. *sylvestrana* Curt.

CLAVIGESTA Obr.

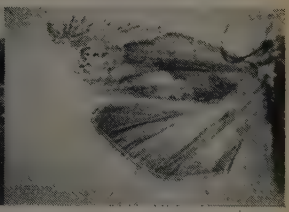
73. *purdeyi* Durr.

SPILONOTA Steph.



77. *ocellana* Schiff.

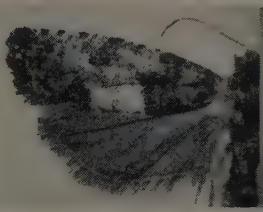
EUCOSMA Hübn.



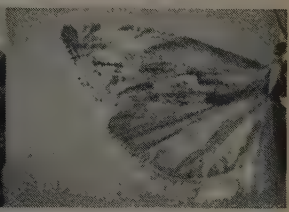
81. *fulvana* Steph.

PETROVA Heinr.

74. *resinella* L.



78. *laricana* Hein.

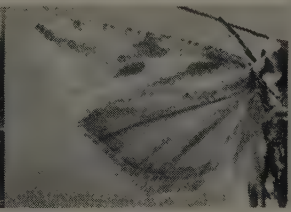


82 *cana* Haw.

PSEUDOCOCCYX Obr.

75. *posticana* Zett.

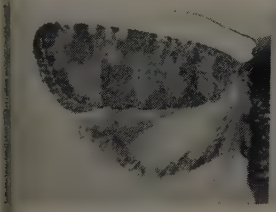
THIODIA Hübn.



79. *citrana* Hübn.

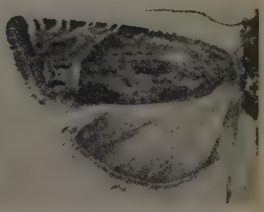
83. *expallidana* Haw.

EUCOSMA Hübn.



76. *turionella* L.

80. *hoenwartiana* Schiff.



84. *aspidiscana* Hübn.

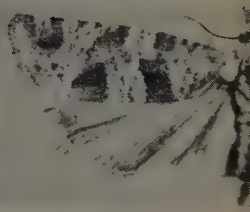
EUCOSMA Hübn.

85. *heringiana* Jäckh

EUCOSMA Hübn.

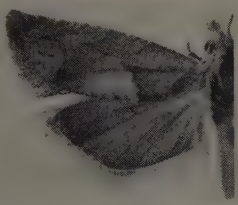
89. *maritima* Westw.

ERIOPSELA Guen.

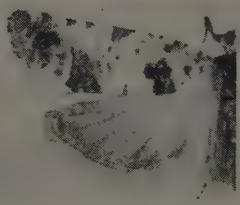


93. *quadrana* Hübn.

PSEUDEUCOSMA Obr.



86. *conterminana* H.-S.



90. *campoliliana* Schiff.

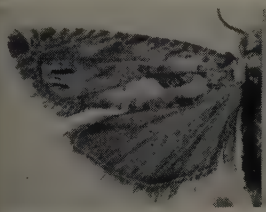
94. *caecimaculana* Hübn:

EPIBLEMA Hübn.

87. *tripoliana* Barr.

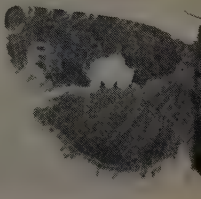
91. *pauperana* Dup.

95. *foenella* L.



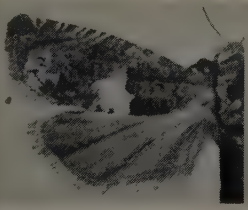
88. *latiorana* H.-S.

92. *pupillana* Cl.

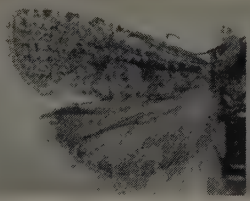


96. *scutulana* Schiff.

EPIBLEMA Hübn. **CACOCHROEA Led.** **NOTOCELIA Hübn.**



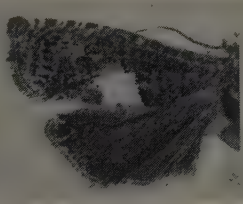
97. *cnicicolana* Zell.



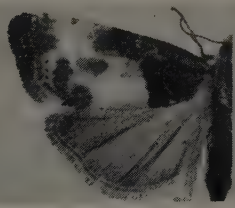
101. *grandaevana* Zell.

105. *rosaecolana* Doubl.

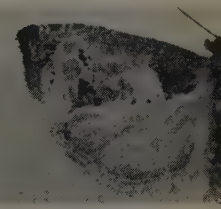
PARDIA Guen.



98. *farfarae* Fletch.



102. *cynosbatella* L.

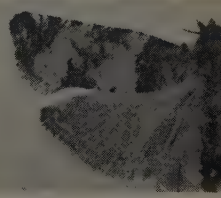


106. *aquana* Hübn.

NOTOCELIA Hübn.

99. *trigeminana* Steph.

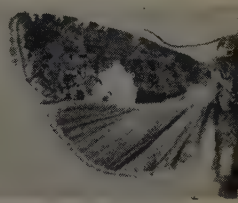
103. *uddmanniana* L.



107. *incarnatana* Hübn.

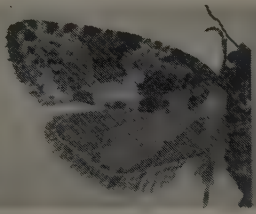
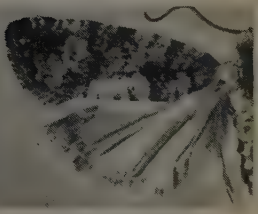
100. *turbidana* Tr.

104. *suffusana* Dup.



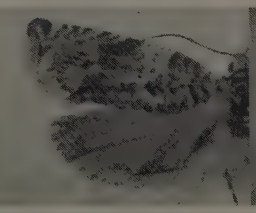
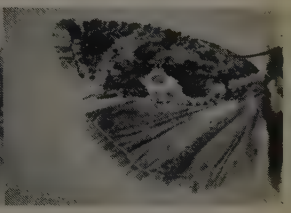
108. *tetragonana* Hübn.

GIBBERIFERA Obr. **GYPSONOMA Meyr.** **ZEIRAPHERA Tr.**

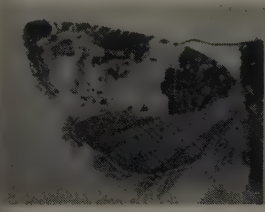



09. *simplana* F. v. Rösl. 113. *oppressana* Tr. 117. *rufimitrana* H.-S.

GYPSONOMA Meyr.

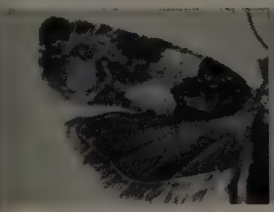
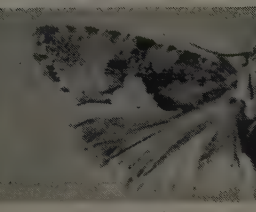



0. *aceriana* Dup. 114. *minutana* Hübn. 118. *insertana* F.



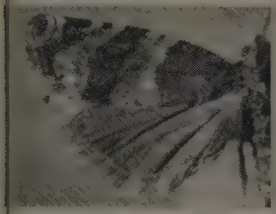
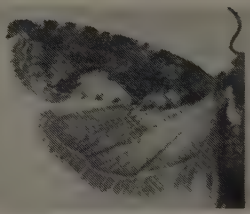
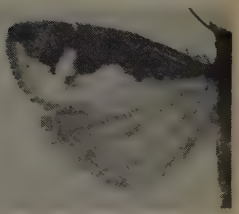
1. *sociana* Haw. 115. *nitidulana* Zell. 119. *diniana* Guen.

ZEIRAPHERA Tr. **GRISELDA Heinr.**

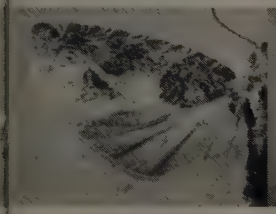
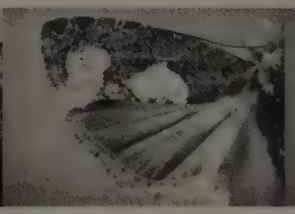
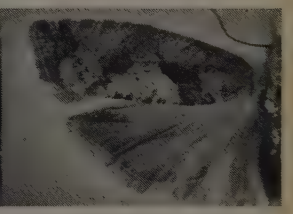
12. *dealbana* Fröl. 116. *ratzeburgiana* Sax. 120. *stagnana* Schiff.

GRISELDA Heinr. **RHOPOBOTA Led.** **EPINOTIA Hübn.**

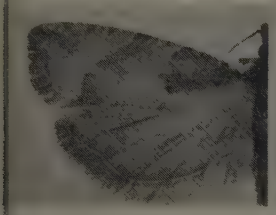
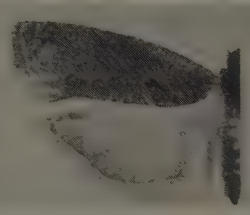
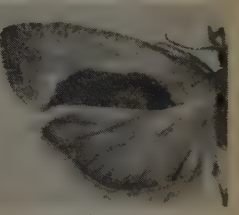
1. *myrtillana* Westw. 125. *naevana* Curt. 129. *caprana* F.

CROCIDOSEMA Zell. **EPINOTIA Hübn.**

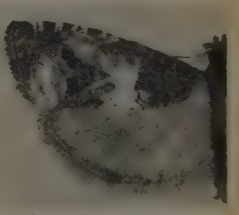
2. *plebejana* Zell. 126. *stroemiana* F. 130. *brunnichana* L.

ACROCLITA Led.

3. *subsequana* H.-S. 127. *maculana* F. 131. *solandriana* L.

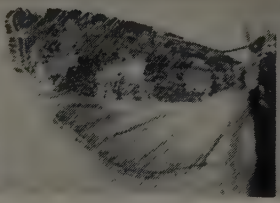
RHOPOBOTA Led.



4. *ustomaculana* Curt. 128. *sordidana* Hübn. 132. *trimaculana* Don.

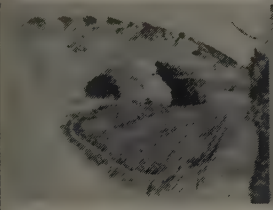
EPINOTIA Hübn. **EPINOTIA Hübn.** **EPINOTIA Hübn.**

133. *subocellana* Don.

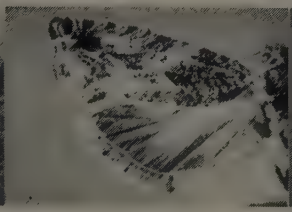


137. *tetraquetrana* Haw.

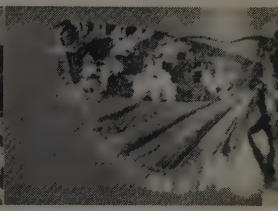
141. *nigricana* H.-S.



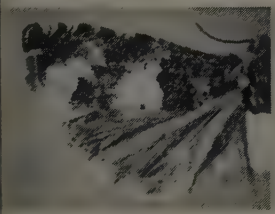
134. *bilunana* Haw.



138. *nisella* Cl.

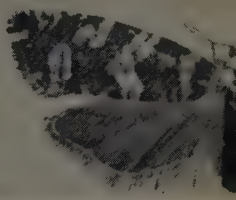


142. *nemorivaga* Tengstr.

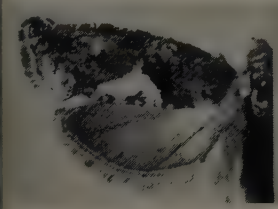


135. *demarniana* F. v. Rösl.

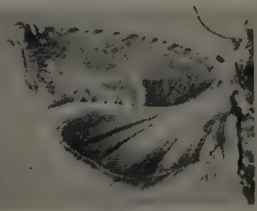
139. *cinereana* Haw.



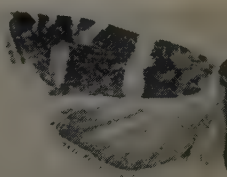
143. *tedella* Cl.



136. *immundana* F. v. Rösl.

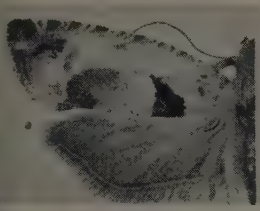


140. *tenerana* Schiff.

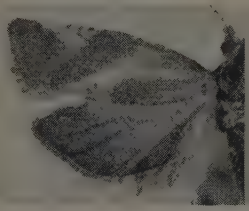


144. *fraternana* Haw.

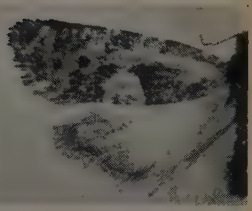
EPINOTIA Hübn. **EPINOTIA Hübn.** **EPINOTIA Hübn.**



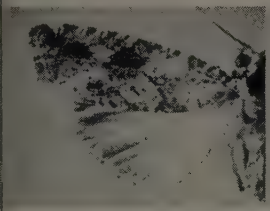
145. *paykulliana* F.



149. *cruciana* L.

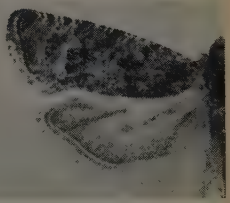


153. *pygmaeana* Hübn.



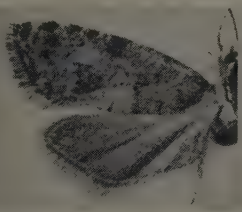
146. *signatana* Dougl.

150. *augustana* Hübn.

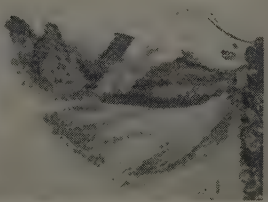


154. *subsequana* Haw.

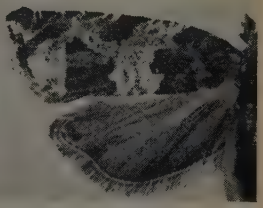
ANCYLIS Hübn.



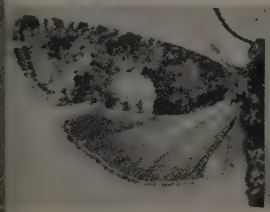
147. *nanana* Tr.



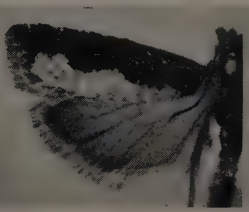
151. *mercuriana* Fröl.



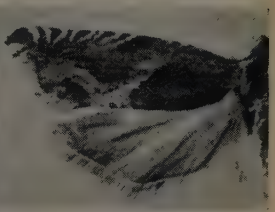
155. *achatana* Schiff.



148. *rubiginosana* H.-S.



152. *crenana* Hübn.

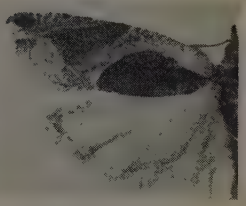


156. *comptana* Fröl.

ANCYLIS Hübn. **ANCYLIS Hübn.** **ANCYLIS Hübn.**

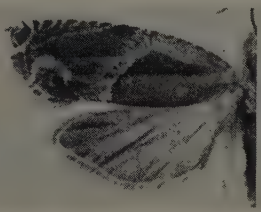
57. *unguicella* L.

161. *upupana* Tr.



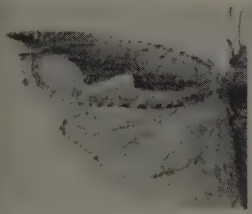
165. *unculana* Haw.

58. *uncana* Hübn.

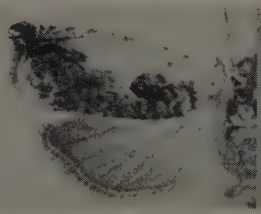


162. *obtusana* Haw.

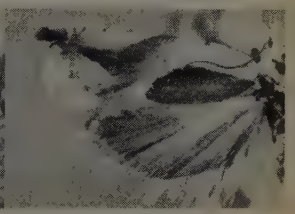
166. *badiana* Schiff.



59. *geminana* Don.

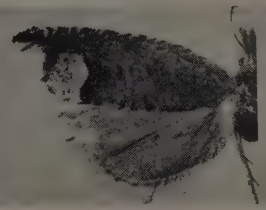


163. *laetana* F.

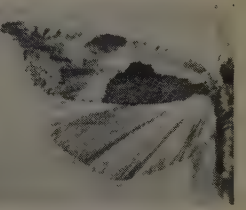


167. *paludana* Barr.

60. *mitterbacheriana* Schiff.



164. *tineana* Hübn.

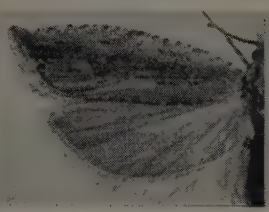


168. *myrtillana* Tr.

ANCYLIS Hübn.

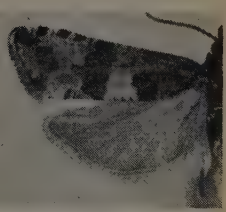
169. *apicella* Schiff.

BACTRA Steph.



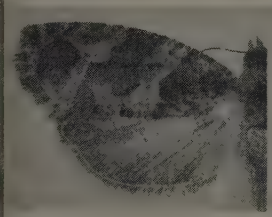
173. *lanceolana* Hübn.

LOBESIA Guen.



177. *littoralis* Westw.

EUDEMIS Hübn.

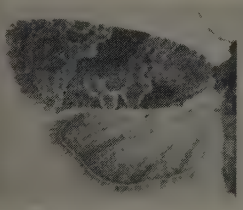


170. *profundana* Schiff.

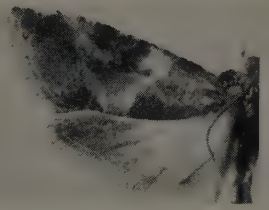
174. *robustana* Chr.

178. *euphorbiana* Frr.

LOBESIA Guen.

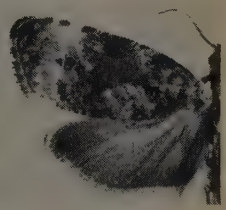


171. *porphyrana* Hübn.



175. *reliquana* Hübn.

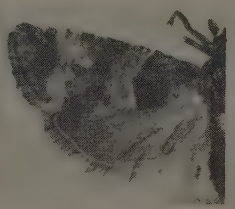
ENDOTHENIA Steph.



179. *gentianaeana* Hübn.

BACTRA Steph.

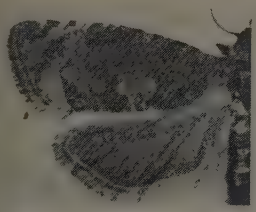
172. *furfurana* Haw.



176. *abscisana* Doubl.

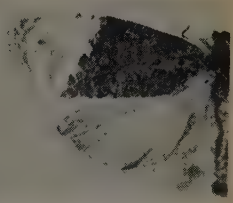
180. *marginana* Haw.

ENDOTHENIA Steph. **ENDOTHENIA Steph.** **APOTOMIS Hübn.**



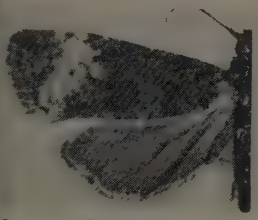
:1. *carbonana* Doubl.

185. *antiquana* Hübn.

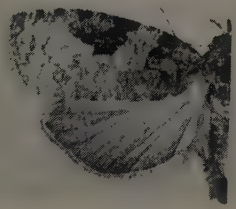


189. *betuletana* Haw.

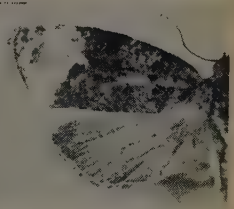
APOTOMIS Hübn.



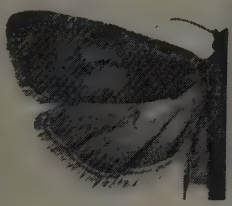
2. *ustulana* Haw.



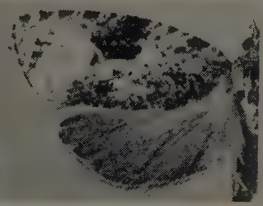
186. *semifasciana* Haw.



190. *capreana* Hübn.

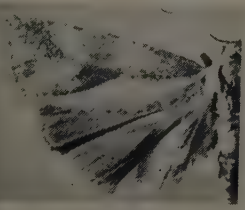


3. *nigricostana* Haw.

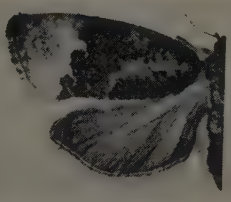


187. *lineana* Schiff.

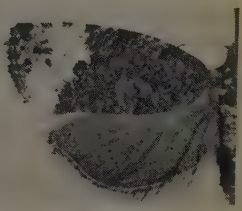
191. *sororculana* Zett.



4. *ericetana* Westw.

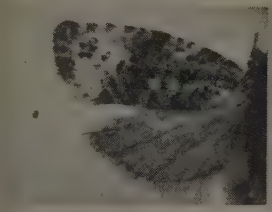


188. *turbidana* Hübn.

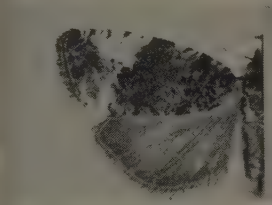


192. *sauciana* Fröl.

APOTOMIS Hübn.

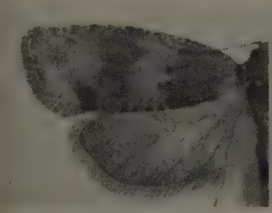


193. *grevillana* Curt.



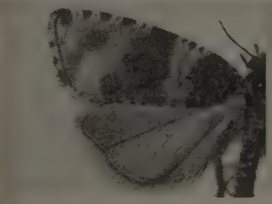
194. *pruniana* Hübn.

SCIAPHILA Tr.



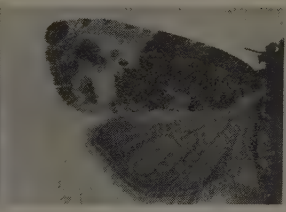
195. *branderiana* L.

ORTHOTAENIA Steph.

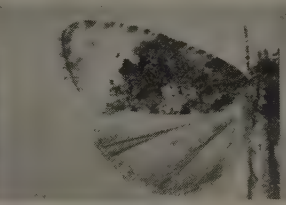


196. *undulana* Schiff.

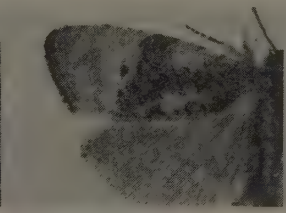
HEDYA Hübn.



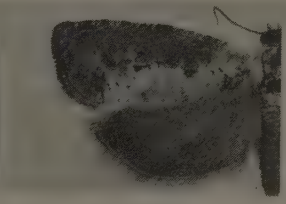
197. *nubiferana* Haw.



198. *ochroleucana* Fröl.

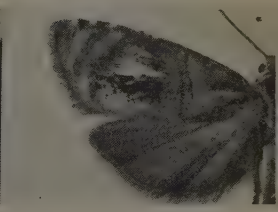


199. *atropunctana* Zett.

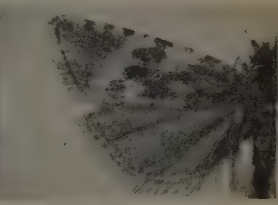


200. *salicella* L.

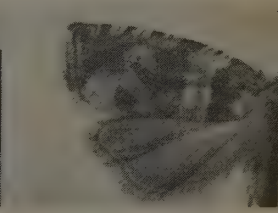
OLETHREUTES Hübn.



201. *arcuella* Cl.



202. *obsoletana* Zett.



203. *doubledayana* Barr.

204. *decrepitana* H.-S.

OLETHREUTES Hübn. **OLETHREUTES Hübn.** **OLETHREUTES Hübn.**

205. *penthinana* Guen.

209. *schulziana* F.

213. *rivulana* Scop.

206. *mygindana* Schiff.

210. *palustrana* Zell.

214. *leucotreta* Meyr.

EXARTEMA Clem.

207. *arbutella* L.

211. *olivana* Tr.

215. *aurofasciana* Haw.

CELYPHOIDES Obr.

208. *metallicana* Hübn.

212. *lacunana* Schiff.

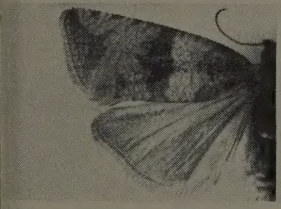
216. *cespitana* Hübn.

CELYPHA Hübn. **Forms** **Forms**

217. *woodiana* Barr.

Epiblema scutulana Schiff. ♂

Epinotia solandriana L.
f. parmatana Hübn.



218. *striana* Schiff.

E. scutulana Schiff. ♀

E. solandriana L.
f. trapezana F.

219. *rufana* Scop.

E. scutulana Schiff.
f. cirsiana Zell. ♂

E. solandriana L.
f. variegata Sheld.

Forms

Ancylis geminana Don.
f. diminutana Haw.

E. scutulana Schiff.
f. cirsiana Zell. ♀

Sciaphila branderiana L.
f. wahlbomiana L.